Paper dated April 17, 2007

Amendment under 37 C.F.R. §1.312

Amendments to the Claims:

This listing of claims will replace all prior listings of claims in the application.

Listing Of Claims:

Claims 1-24 (canceled).

Claim 25 (currently amended) A position detection method for detecting a position of a substrate in a detection direction of a position detection mark substantially parallel to a surface of the substrate upon receiving light from the position detection mark formed in a shot on the surface of the substrate, comprising:

an image information acquisition step of obtaining two-dimensional image information of the position detection mark from the light that has been received by an image sensor having a plurality of lines of which a plurality of pixels are arrayed in a detection direction of the position detection mark substantially parallel to the surface of the substrate and in a direction orthogonal to the detection direction;

a conversion step of converting the image information to a plurality of lightintensity signals for each line of the plurality of lines, the plurality of light intensity signals being
primary image signals obtained from the lights from different areas of a mask mark area in the
shot in the direction of the position detection mark substantially parallel to the surface of the
substrate and in the direction orthogonal to the detection direction;

a determination step of determining whether the light-intensity signal of each line of the plurality of lines is valid or not; and

a position information calculation step of calculating position information of the position detection mark from light-intensity signals of only valid lines other than light-intensity signals of invalid lines.